

Application No. 09/684,898
Amendment dated November 8, 2004
Reply to Office Action of May 7, 2004

AMENDMENTS TO THE CLAIMS:

Listing of claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended): A lithography system comprising:

an exposure apparatus which projects a pattern on to a substrate on which resist is coated,

a substrate processing apparatus provided adjacent to said exposure apparatus which processes the substrate:

a first chamber containing the exposure apparatus therein;

a second chamber provided adjacent to the first chamber separately from said first chamber and which contains the substrate processing apparatus therein;

an environment sensor provided in at least one of the first and the second chambers which measures an environment of at least a portion in said at least one of the first and the second chambers; and

a control device electrically connected to the environment sensor, said control device controlling the environment in said at least the other of the first and the second chambers on the basis of a measured value given from said environment sensor in such a manner that the environment of ~~at least a portion on a side of~~ one of said substrate processing apparatus and said

exposure apparatus becomes the same as the environment of ~~at least a portion on a side of said~~
~~substrate processing apparatus~~ the other apparatus.

2. (Previously presented): A lithography system according to claim 1, wherein said environment sensor measures at least one of pressure, temperature and humidity in said at least one of the first and the second chambers.

3. (Original): A lithography system according to claim 2, wherein said substrate processing apparatus has at least one of a resist coating function and a developing function.

4. (Previously presented): A lithography system according to claim 1, wherein the resist coated on the substrate is chemically amplified resist.

5. (Currently amended): A lithography method for controlling an environment in an exposure apparatus which exposes a substrate and which is provided adjacent to a substrate processing apparatus which processes the substrate before or after exposure, the method comprising the steps of:

obtaining data regarding the environment of at least a portion in a processing chamber in which said substrate processing apparatus is provided; and

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controlling the environment in an exposure chamber in which said exposure apparatus is provided and which is provided separately from the processing chamber, on the basis of the obtained data in such a manner that the environment of ~~at least a portion~~ in said exposure chamber becomes the same as the environment in said processing chamber.

6. (Original): A method according to claim 5, wherein said substrate processing apparatus includes at least one of a coater which coats sensitive agent on the substrate before the exposure and a developer which develops the substrate after the exposure.

7. (Canceled)

8. (Original): A method according to claim 5, wherein the data relates to at least one of air pressure, temperature and humidity.

9. (Canceled)

10. (Original): A method according to claim 5, wherein said exposure apparatus and said substrate processing apparatus are assembled as an in-line system.

11. (Original): A method according to claim 5, wherein chemically amplified resist is coated on the substrate.

12. (Currently amended): A lithography method for controlling an environment in a substrate processing apparatus which processes a substrate before or after exposure, said substrate processing apparatus being provided adjacent to an exposure apparatus which exposes the substrate before or after the processing, the method comprising the steps of:

obtaining data regarding the environment of at least a portion in an exposure chamber in which said exposure apparatus is provided; and

controlling the environment in a processing chamber in which said processing apparatus is provided and which is provided separately from the exposure chamber, on the basis of the obtained data in such a manner that the environment ~~of at least a portion~~ in said substrate processing chamber becomes the same as the environment in said exposure chamber.

13. (Previously presented): A method according to claim 12, wherein the processing apparatus includes at least one of a coater which coats sensitive agent on the substrate before the exposure and a developer which develops the substrate after the exposure.

14. (Canceled)

15. (Previously presented): A method according to claim 12, wherein the data relates to at least one of air pressure, temperature and humidity.

16. (Canceled)

17. (Original): A method according to claim 12, wherein the data relates to at least one of air pressure, temperature and humidity.

18. (Canceled)

19. (Original): A method according to claim 12, wherein said exposure apparatus and said processing apparatus are assembled as an in-line system.

20. (Currently amended): A method for making an exposure apparatus which exposes a substrate, said exposure apparatus being provided adjacent to a substrate processing apparatus contained in a processing chamber which processes the substrate before or after exposure of the substrate, the method comprising the steps of:

providing an exposure body in an exposure chamber different from the processing chamber, the exposure body performing an exposure operation of the substrate;

providing an adjusting device which adjusts an environment ~~of at least a portion~~ in said exposure chamber; and

providing a control device which controls said adjusting device on the basis of data regarding the environment in said processing chamber in such a manner that the environment in said exposure chamber becomes the same as the environment ~~of at least a portion~~ in said processing chamber.

21. (Original): A method according to claim 20, wherein said substrate processing apparatus includes at least one of a coater which coats sensitive agent on the substrate before the exposure and a developer which develops the substrate after the exposure.

22. (Original): A method according to claim 20, wherein the data relates to at least one of air pressure, temperature and humidity.

23. (Currently amended): A method for making a substrate processing apparatus which processes a substrate and which is provided adjacent to an exposure apparatus contained in an exposure chamber which exposes the substrate before or after the processing of the substrate, the method comprising the steps of:

providing an exposure body in a processing chamber different from the exposure chamber, the processing body performing a processing operation to the substrate;

providing an adjusting device which adjusts an environment ~~of at least a portion~~ in said processing chamber; and

providing a control device which controls said adjusting device on the basis of data regarding the environment in said exposure chamber in such a manner that the environment in said processing chamber becomes the same as the environment ~~of at least a portion~~ in said exposure chamber.

24. (Original): A method according to claim 23, wherein said substrate processing apparatus includes at least one of a coater which coats sensitive agent on the substrate before the exposure and a developer which develops the substrate after the exposure.

25. (Original): A method according to claim 23, wherein the data relates to at least one of air pressure, temperature and humidity.

26. (Currently amended): A lithography method using an exposure apparatus which exposes a substrate and a substrate processing apparatus which processes the substrate before or after exposure, the method comprising the steps of:

obtaining data regarding an environment of at least a portion within a chamber of one of an exposure chamber in which said exposure apparatus is contained and a processing chamber in

which said substrate processing apparatus is contained and which is provided separately from the exposure chamber; and

controlling the environment in the other chamber of the exposure chamber and the processing chamber on the basis of the obtained data in such a manner that the environment ~~of at least a portion~~ in one of said exposure chamber and said processing chamber becomes the same as the environment in the other of said chambers.

27. (Currently amended): An exposure apparatus which exposes a substrate and which is provided adjacent to a substrate processing apparatus contained in a processing chamber which processes the substrate before or after exposure of the substrate, the exposure apparatus comprising:

an exposure chamber which is separate from the processing chamber and contains the exposure apparatus;

an adjusting device connected to said exposure chamber and which adjusts an environment ~~of at least a portion~~ in said exposure chamber; and

a control device electrically connected to said adjusting device and which controls said adjusting device on the basis of data regarding the environment of at least a portion in said processing chamber in such a manner that the environment in said exposure chamber becomes the same as the environment in said processing chamber.

28. (Currently amended): A substrate processing apparatus which processes a substrate and which is provided adjacent to an exposure apparatus contained in an exposure chamber which exposes the substrate before or after the substrate processing, the substrate processing apparatus comprising:

a processing chamber which is separate from the exposure chamber and contains the substrate processing apparatus;

an adjusting device connected to said processing chamber and which adjusts an environment ~~of at least a portion~~ in said processing chamber; and

a control device electrically connected to said adjusting device and which controls said adjusting device on the basis of data regarding environment of at least a portion in said exposure chamber in such a manner that the environment in said processing ~~[[:]]~~ chamber becomes the same as the environment in said exposure chamber.

29. (Previously presented): A lithography system according to claim 3, wherein the resist coated on the substrate is chemically amplified resist.

30. (Previously presented): A lithography system according to claim 2, wherein the control device at least controls said environment on the basis of the measured value given from said environment sensor provided near a portion where said first chamber and said second chamber are connected to each other.

31. (New): A lithography system comprising:

an exposure apparatus which projects a pattern on to a substrate on which resist is coated,

a substrate processing apparatus which processes the substrate:

a first chamber which contains said exposure apparatus therein;

a second chamber which is arranged separately from said first chamber and which contains said substrate processing apparatus therein;

a first environment sensor provided in the first chamber, which measures an environment in the first chamber;

a second environment sensor provided in the second chamber, which measures an environment in the second chamber; and

a control device which is electrically connected to the first and the second environment sensors, and which controls the environment in one of the first chamber and the second chamber on the basis of a measured value given from said both environment sensors in such a manner that the environment in one of said first and second chambers becomes the same as the environment in the other of the first and second chambers.

32. (New): A lithography system comprising:

an exposure apparatus which projects a pattern a pattern on to a substrate on which resist is coated,

a substrate processing apparatus which processes the substrate;

a first chamber which contains said exposure apparatus therein;

a second chamber which is arranged separately from said first chamber and which contains said substrate processing apparatus therein;

a first environment sensor provided in the first chamber, which measures an environment in the first chamber;

a second environment sensor provided in the second chamber, which measures an environment in the second chamber;

a calculation device which is electrically connected to the first and the second environment sensors, and which calculates an environment difference between the both chambers; and

a control device which is electrically connected to the calculation device and which controls the environment in one of the first chamber and the second chamber on the basis of the environment difference.

33. (New): A substrate processing apparatus which processes a substrate, the apparatus comprising:

a processing chamber which contains said substrate processing apparatus therein;

a first environment sensor provided in the processing chamber, which measures an environment in the processing chamber; and

a control device which is electrically connected to the first environment sensor and the second environment sensor that measures an environment in an exposure chamber that contains an exposure apparatus therein, the exposure apparatus exposing the substrate before or after the substrate is processed by the substrate processing apparatus, and the control device controlling

the environment in the processing chamber on the basis of a measured value given from said both environment sensors in such a manner that the environment in the processing chamber becomes the same as the environment in exposure chamber.

34. (New): A substrate processing apparatus which processes a substrate, the apparatus comprising:

a processing chamber which contains said substrate processing apparatus therein;

a first environment sensor provided in the processing chamber, which measures an environment in the processing chamber;

a calculation device which is electrically connected to the first environment sensor and a second environment sensor that measures an environment in an exposure chamber that contains an exposure apparatus therein, the exposure apparatus exposing the substrate before or after the substrate is processed by the substrate processing apparatus, and the calculation device calculating an environment difference between the both chambers, and

a control device which is electrically connected to the calculation device and which controls the environment in the processing chamber on the basis of the environment difference.